IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ROKU, INC.,

Plaintiff,

C.A. No. 21-1035-MN

v.

ALMONDNET, INC. and INTENT IQ, LLC,

Defendants.

DEFENDANTS' ANSWERING BRIEF IN OPPOSITION TO PLAINTIFF'S MOTION TO DISMISS COUNTERCLAIMS (D.I. 24)

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I. <u>INTRODUCTION</u>

Roku's attempt to invalidate *170 claims* across five patents in two separate patent families—all at the pleading stage—fails. Contrary to Roku's oversimplification of the claims, the patents are not merely directed to "targeted advertising," or any other purported abstract idea. Rather, the patents disclose specific and concrete solutions to problems in conventional crossmedia networks, as specifically described in the specifications. The Court must accept these statements as true and construe them in the light most favorable to the patent owner. Roku's conclusory and unsupported attorney argument that the claims are drawn to ineligible subject matter does not meet its heightened burden to show that the *only* plausible reading of the patents must be that there is clear and convincing evidence of ineligibility. Its motion should be denied.

II. RELEVANT LEGAL STANDARDS

To determine patent eligibility under § 101, courts conduct a two-step analysis as articulated by the Supreme Court in *Alice Corp. Pty. V. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). First, the court must determine "(1) whether the claim, as a whole, is 'directed to' patent-ineligible matter—here, an abstract idea—and (2) if so, whether the elements of the claim, considered individually or as an ordered combination 'transform the nature of the claim' into a patent-eligible application." *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1347 (Fed. Cir. 2018).

The Federal Circuit has emphasized the importance of the first step of the § 101 analysis, explaining that *Alice* "plainly contemplates that the first step of the inquiry is a meaningful one." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). The "directed to" inquiry requires consideration of the "in light of the specification" to determine whether "their character as a whole is directed to excluded subject matter." *Id.* If the claims are not directed to an abstract idea, then the inquiry ends and the claims are eligible under § 101. *Ancora*, 908 F.3d at 1349.

But if the claims are directed to an abstract idea, the second step of the *Alice* analysis calls

for the court to "consider the elements of each claim both individually and 'as an ordered combination' to determine whether [the claims contain] an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself." *Alice*, 134 S. Ct. at 2355. Even where elements are conventional, the specific arrangement of conventional technologies can also form the inventive concept. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016).

"At the motion to dismiss stage a patent claim can be found directed towards patent ineligible subject matter if the *only* plausible reading of the patent must be that there is clear and convincing evidence of ineligibility." *JSDQ Mesh Techs. LLC v. Fluidmesh Networks, LLC*, No. 16-CV-212-GMS, 2016 WL 4639140, at *1 (D. Del. Sept. 6, 2016) (emphasis in original). "Rarely can a patent infringement suit be dismissed at the pleading stage for lack of patentable subject matter." *Bristol-Myers Squibb Co. v. Merck & Co.*, No. CV 15-560-GMS, 2016 WL 1072841, at *1 n.1 (D. Del. Mar. 17, 2016).

III. THIS COURT SHOULD NOT DECIDE § 101 ELIGIBILITY IN LIGHT OF THE PENDING MOTIONS TO DISMISS OR TRANSFER

As set forth in detail in AlmondNet's motion to dismiss or transfer (D.I. 14), Roku filed this declaratory judgment suit within minutes after AlmondNet informed Roku of its intent to file a complaint in Texas, and this case thus fits squarely within the anticipatory lawsuit exception to the first-to-file rule. Accordingly, this case should be dismissed, or, in the alternative, transferred to the Western District of Texas, where AlmondNet's case concerning the same claims (and multiple other related cases) are pending. The Texas court is the proper forum for litigating the merits of the parties' claims and defenses, and this Court should not decide Roku's § 101 challenge to the asserted patents.

IV. ROKU ALSO WAIVED ITS RIGHT TO SEEK DISMISSAL UNDER 12(b)(6)

Roku answered AlmondNet's counterclaims (D.I. 26), and its Rule 12(b)(6) motion to dismiss should therefore be denied as moot. *See Telebrands Corp. v. 1ByOne Prod. Inc.*, No. CV 17-997-JFB-SRF, 2017 WL 5593785, at *2 (D. Del. Nov. 21, 2017) (denying motion to dismiss as moot where defendant filed answer, affirmative defenses, and counterclaims while its motion to dismiss was still pending). As explained by this Court, a motion to dismiss "challenges the sufficiency of the allegations within the complaint; an answer admits or denies those allegations and raises any available affirmative defenses." *Id.* Thus, "[w]hen an answer is filed prior to the resolution of a motion to dismiss, the motion to dismiss becomes moot." *Id.*

Accordingly, Roku's motion should be denied as moot.

V. <u>REGARDLESS, ROKU HAS NOT MET—AND CANNOT MEET—ITS</u> BURDEN TO SHOW THAT THE CLAIMS ARE INVALID UNDER § 101

- A. Roku Has Not Shown—and Cannot Show—that the Claims Are Directed to an Abstract Idea Under *Alice* Step One.
 - 1. Controlling Law Makes Clear the "Directed To" Summary Cannot Oversimplify the Claims and Must Account for the Claimed Advances

As the Federal Circuit has repeatedly stated, the first step of *Alice* inquiry must be a "meaningful one, *i.e.*, that a substantial class of claims *are not* directed to a patent-ineligible concept." *Enfish*, 822 F.3d at 1334–36 (Fed. Cir. 2016)¹. A patent claim is not abstract, as a matter of law, if it presents a "specific solution to [an] existing technological problem." *Data Engine Techs.*, *LLC v. Google*, *LLC*, 906 F.3d 999, 1009 (Fed. Cir. 2018). Further, the Federal Circuit has made clear that the "directed to" analysis must at least account for the invention's "*claimed advance*" over the art. *Ancora*, 908 F.3d at 1347–49; *see also Kononklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1150 (Fed. Cir. 2019). Not undertaking this analysis is legal error, as the claimed advance "allow[s] for the improvement realized by the invention." *McRO*, *Inc. v.*

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¹ All quotations cleaned up and all emphases added unless otherwise noted.

Bandai Namco Games Am. Inc., 837 F.3d 1299, 1313 (Fed. Cir. 2016). This determination may be made by reviewing the intrinsic record of the patent, but other evidence also may be considered. See, e.g., TecSec, Inc. v. Adobe Inc., 978 F.3d 1278, 1292 (Fed. Cir. 2020) ("We have approached the Step 1 'directed to' inquiry by asking what the patent asserts to be the focus of the claimed advance over the prior art. In conducting that inquiry, we must focus on the language of the Asserted Claims themselves, considered in light of the specification."); CardioNet, LLC v. InfoBionic, Inc., 955 F.3d 1358, 1373–74 (Fed. Cir. 2020) (reversing district court's oversimplification of claims under step one and finding that a holding that the claims are not abstract did "not require a review of the prior art or facts outside of the intrinsic record").

Significantly, while any determination of what claims are "directed to" necessarily involves some simplification of the claimed limitations as a whole, courts "must be *careful to avoid oversimplifying the claims*" by looking at them generally and failing to account for the specific requirements" of the claims. *McRO*, 837 F.3d at 1313. Doing so will lead to reversible error. *Id*. Thus, the "directed to" inquiry "cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world." *Enfish*, 822 F.3d at 1335 (emphasis in original). Rather, the "directed to" inquiry "applies a stage-one filter to claims, considered in light of the specification, based on whether 'their character as a whole is directed to excluded subject matter." *Id*.

2. Roku's Oversimplified and Conflicting Summaries of the "LAN" Network Patents Improperly Ignore the Patents Claimed Advances

Roku wrongly contends that all 67 claims in the "LAN" Network '398 and '878 patents are "directed to the abstract idea of causing an action based on an association between identifiers for two devices and information related to a first device." (D.I. 25 at 15.) But even a cursory review

of the patent claims or specification of these "LAN" Network patents proves this is an extreme oversimplification that ignores the core claimed advance. And a review of the prior Patent Trial and Appeal Board ("PTAB") rulings on the patents only further confirms that Roku has ignored the key aspects of the claimed advance.

Unlike the facts in Roku's inapposite cases, the claims here are *not* directed to a result or effect that itself is the abstract idea and merely invoke generic computer processes or machinery. Rather, when properly accounting for the claimed advance, required by the Federal Circuit, there can be no question that the claims provide a technical solution to a technical problem that was unique to computer network technology.

Specifically, even ignoring more than half the limitations in the independent claims alone, the claimed advances of the "LAN" Network patents cover several additional core "claimed advances" that Roku improperly disregards, underlined below:

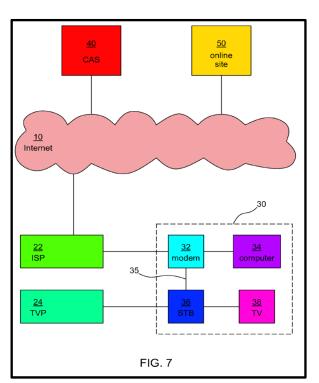
- '398 Patent: <u>automatically</u> causing, with a programmed computer system, an action with respect to a second device by an <u>electronic</u> identifier <u>electronically associated</u> with a first device, based <u>on a connection</u>, <u>before the action</u>, <u>of the devices to a common local area or</u> "LAN" network.
- '878 Patent: a computer system, with a server, programmed to detect an association among multiple electronic devices, connected through a common local area "LAN" network, wherein association-detection information includes dynamically assigned IP address assigned to a modern that connects a router to the Internet and used to determine the devices have accessed the Internet during a predetermined period via a common IP address.

The patent specification makes this abundantly clear, and, in so doing, contradicts the very premise on which Roku's motion rests.

After providing a lengthy discussion of the background and technical descriptions of various electronic devices and data in the industry, the patent specification makes clear that the inventors sought to solve a specific problem. That specific problem was rooted in and unique to *cross-media networks*. That is: how do we "avoid the use of PII"—or "personally identifiable

information," such as a user's name, birth date, or account numbers—when targeting users on one electronic device medium "based on activity in another"? '398 patent at 7:13–22. As set forth in the patent specifications, while various systems were used based on user behavior, many relied on the collection of PII of the user. And while there were some systems wherein electronic messages, such as advertisements, could be targeted without collecting PII, in those systems, the medium of the behavior of the various devices within the system were the same and the devices could even have dynamic device addresses. *Id.* at 6:51–7:12. Moreover, "many and perhaps most search sites and content sites accessed online are not owned or controlled by television service providers [and] many and perhaps most search sites and content sites do not typically collect PII to identify those users who access them online." *Id.* at 7:50–57. Properly stated, *this problem* is not a fundamental economic or longstanding commercial problem, a method of organizing human activity, a mathematical algorithm, or other abstract activity.

Mr. Shkedi, the named inventor, sought to tackle the problem of avoiding the use of PII when targeting advertising in one electronic medium based on activity in another electronic medium. *Id.* at 7:12–23. And with dozens of columns and figures of technical teachings, the patents taught specific *cross-media network-rooted solutions* on how to overcome these problems. One example embodiment depicts a central server (CAS) 40



and online site 50 connected to internet 10, modem 32 connected to internet service provider (ISP)

22 and Internet 10 for providing online access, computer 34, set-top box (STB) 36, and TV 38 connected to modem 32, and television provider (TVP) 24 connected to STB 36. *Id.* at 12:47–13:21. An identifier can be assigned to STB 36, such as an equipment serial number or a portion thereof, a device MAC address or a portion thereof, or other identifying coder or data element, and may include the IP address the STB is using when in contact with CAS 40. *Id.* at 15:1–41. If a unique identifier is used, then misdirecting the television ad is virtually impossible. *Id.*

And these specific technical solutions were captured in even the broadest claims, such as independent claim 13. The aspects of the claim missing from the prior art—the "claimed advance"—expressly limits the claims to not just any network solution or even cross-media network solution, but rather a specific one that: automatically causing, with a programmed computer system, an action with respect to a second device by an electronic identifier electronically associated with a first device, based on a connection, before the action, of the devices to a common local area or "LAN" network.

These portions of the patent specification and claims alone are enough to make clear what the claimed advance is. *See, e.g., TecSec*, 978 F.3d at 1292 (directing court to look at "what *the patent asserts*" to be the claimed advance, focusing on the language of the asserted claims themselves, considered in light of the specification). They also contradict Roku's "directed to" analysis—and confirm Roku oversimplified the claims beyond what controlling law allows. The same is true of the intrinsic record for the '878 patent, where both the core aspects of the claims and the reasons for allowance closely tracks AlmondNet's position and flatly contradicts Roku's motion:

4. The following is an examiner's statement of reasons for allowance: Regarding claims 52, 64 and 73, the prior art of record fails to teach or fairly suggest a method wherein determining the association in part (a) is done by using the stored association-detection information to determine that the two or more Internet-accessing electronic devices have separately accessed the Internet through a router of the LAN during a predetermined period of time via a common IP address. Claims 1-20 are a unique

Ex. 3.

But there is more. Other evidence tethered to AlmondNet's complaint only confirms the reversible errors in Roku's step-one analysis. In particular, after examining an *inter partes* review on this patent, the PTAB determined that the various prior art and numerous grounds of record did not teach or suggest the below highlighted elements:

- 13. A method implemented using a programmed hardware computer system, the method comprising:
- (a) based on first electronic profile data associated with an electronic identifier of a first device, automatically <u>causing</u>, with the computer system, <u>an action to be taken</u> with respect to a second device that is indicated at the time of the action by an electronic identifier electronically associated with the first device identifier;
- (b) wherein the electronic association between the first and second device identifiers is based on connection, before the action, of each of the first and second devices, independently of the other, to a common local area network, wherein the computer system is connected to the local area network through the Internet but is not in the local area network.

Ex. 5. In other words, this post-issuance record at the PTAB only confirms the claimed advance AlmondNet proposes—and flatly contradicts Roku's purported claimed advance.

Roku's assertion that all the "LAN" Network claims are directed to a single affirmative step of merely "causing an action" also fails. The only way to reach this conclusion would be to simply "disregard elements of the claims at issue that the specification makes clear are important parts of the claimed advance in the combination of elements." *TecSec*, 978 F.3d at 1294. Characterizing the claims at such a "high level of abstraction' that is 'untethered from the

language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Id.* at 1293. The Federal Circuit has expressly rejected such characterizations. *See, e.g., SRI Int'l, Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1304 (Fed. Cir. 2019) (rejecting argument that the claims were simply directed to "generic steps required to collect and analyze data"); *Packet Intel. LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1308 (Fed. Cir. 2020), cert. denied, 141 S. Ct. 2521 (2021) (rejecting defendants' oversimplification of the claims as being directed to "collection, comparison, and classification of information"). And regardless, Roku's false assertion would not help its cause anyway. Under controlling law, "[a]ll that is required at the eligibility phase is that the claim itself must identify 'how' that functional result is achieved by limiting the claim scope to ... *concrete action*, in the case of a method claim." *Free Stream Media Corp. v. Alphonso, Inc.*, 996 F.3d 1355, 1363-64 (Fed. Cir. 2021).

Given Roku's improper attempts to gloss over of key aspects of the claimed advance, it should also be no surprise that their description of what the claims are "directed to" contradict themselves and change throughout its brief. They range from merely "targeted advertising" (e.g., D.I. 25 at 2), to causing an action based on an association between identifiers for two devices and information related to a first device (*id.* at 5), to just merely a claim directed to "a single" claimed specific step of "causing an action" (*id.* at 4). And these are further contradicted by Roku's admission that, at its most basic level, the inventions must be referred to, in the very least, as being rooted in, and having a label of, Local Area Network or "LAN" Network inventions. This only further exposes the fatal flaws underlying Roku's motion.

At any rate, the claimed advance here is not abstract as a matter of law under the Federal Circuit caselaw, including *DDR Holdings* and its progeny. In *DDR Holdings*, the Federal Circuit held that the asserted internet-advertising patent's claims addressed the "problem of retaining

website visitors that ... would be easily transported away from a host's website after 'clicking' on an advertisement and activating a hyperlink." *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). But the claims provided a specific solution to this, in that they required a claimed advance requiring an "outsource provider" having a web server which directs the visitor to an automatically-generated hybrid web page that combines visual "look and feel" elements from the host website and product information from the third-party merchant's website related to the clicked advertisement. *Id.* at 1258–59. This made it patent-eligible as a matter of law, because the claimed solutions were limited to a specific technical solution to a problem that existed in the same technical environment, online advertising. *Id.*

The record confirms that the same is true of the specific asserted claims at issue here, which claim specific technical "LAN" Network solution to a cross-media LAN Network problem. This stands in stark contrast with the claims in *Free Stream*, which did *not* claim any specific solution, as discussed further below. This is why the PTAB has already ruled that other AlmondNet patents covering similar subject matter and solving similar technical problems in the field are *not abstract*—and in so doing, rejected arguments similar to the ones Roku makes now. Exs. 5–9.

Indeed, this Court has also found supposed "targeted-advertising" patents to be eligible at the pleadings stage, because they "address the problem of ensuring that Internet search engines retrieve not only Web pages and documents written in the query language (source), but in foreign (target) languages as well." *Improved Search LLC v. AOL Inc.*, 170 F. Supp. 3d 683, 694 (D. Del. 2016). As with AlmondNet's patents, the methods recited "sufficiently specific steps, so as to ensure that the claims are more than a drafting effort designed to monopolize the [purported] abstract idea." *Id*.

The above-discussed errors in Roku's analysis are compounded by yet another one. For instance, in an effort to paint all the dozens of claims with the same erroneously broad brush, Roku claims, with no support, that claim 13 of the '398 patent is representative of *all* claims in the LAN Network patents. (D.I. 25 at 12.) But one look at a comparison between claim 13 and another claim in the '878 LAN Network patent proves that claim 13's specific technical claimed advance cannot possibly be representative of the specific claimed advances of all other claims:

Claim 13 of '398 Patent	Claim 21 of LAN '878 Patent
13. A method	21. A computer system comprising at least one hardware server
implemented using a	computer, wherein the computer system is programmed and
programmed hardware	connected to perform a method comprising:
computer system, the	(a) with the computer system, determining an association between
method comprising:	device identifiers of two or more Internet-accessing electronic
(a) based on first	devices based on electronically stored association-detection
electronic profile data	informationwherein the stored association-detection information
associated with an	for each of the plurality of Internet-accessing electronic devices
electronic identifier of a	includes:
first device,	(i) a device identifier;
automatically causing,	(ii) at least one dynamically assigned IP address assigned to a
with the computer	modem that connects a router of the LAN to the Internet; and
system, an action to be	(iii) at least one timestamp specifying a time when the Internet-
taken with respect to a	accessing electronic device accessed the Internet via the router of
second device that is	the LAN;
indicated at the time of	(b) wherein determining the association in part (a) is done by using
the action by an	the stored association-detection information to determine that the
electronic identifier	two or more Internet-accessing electronic devices have <u>separately</u>
electronically associated	accessed the Internet through a router of the LAN during a
with the first device	predetermined period of time via a common IP address;
identifier;	(c) wherein the computer system determining the association in part
(b) wherein the electronic	(a) is outside the LAN and is connected to the LAN through the
association between the	Internet;
first and second device	(d) with the computer system, using the association determined in
identifiers is based on	part (a) to utilize user profile information associated with the device
connection, before the	identifier of a first of the associated Internet-accessing electronic
action, of each of the first	devices, and comprising behavioral or demographic data collected
and second devices,	via the first of the associated Internet-accessing electronic devices,
independently of the	to take an automatic action with respect to a second of the
other, to a common local	associated Internet-accessing electronic devices using the device
area network, wherein	

the computer system is connected to the local area network through the Internet but is not in the local area network. identifier of the second of the associated Internet-accessing electronic devices;

wherein the computer system is programmed to perform the method even when the first device comprises a mobile device that is connected to the LAN only intermittently; (ii) wherein the computer system is programmed to utilize in part (d) of the method user profile information associated with the device identifier that comprises behavioral data collected via the first device at a time when the first device is not connected to the LAN; (iii) wherein the computer system is programmed to receive the behavioral data collected via the first device as a result of redirection of the first device from an online site visited by the first device while the first device is not connected to the LAN; and (iv) wherein the automatic action that the computer system is programmed to take comprises (A) selecting an advertisement, from among a plurality of possible advertisements, based at least in part on at least a portion of the user profile information associated with the device identifier of the first device, and (B) causing the selected advertisement to be directed to the second device; and wherein the computer system is programmed to perform the method even when the device identifiers of the first device and the second device include no personally identifiable information pertaining to a user of the first device or the second device.

As held by the Federal Circuit, it is "incorrect to consider whether a patent as a whole is abstract"—the "analysis is claim specific." Realtime Data LLC v. Reduxio Sys., Inc., 831 F. App'x 492, 497 (Fed. Cir. 2020). Generalizing the claims "absent a finding of the representativeness of certain claims and without considering the 'directed to' inquiry" is error. Id.

3. Roku's Oversimplified and Conflicting Summaries of the "Set-Top Box" Network Patents Also Improperly Ignore the Claimed Advances; Under Any Reasonable View, the Claims are Not Abstract as a Matter of Law

As for the remaining three electronic "Set-Top Box" patents, Roku repeats the same errors. For instance, while paying lip service to the fact that there are several differences between the teachings and claims of the "Set-Top Box" Network patent families and the "LAN" Network patent families, in the very next breath, Roku alleges that those "differences do not change that claim 1 of the '164 Patent is directed to the abstract idea of targeting an advertisement based on

user profile information." (D.I. 25 at 17.) And using the same series of improper shortcuts to meet its heavy burdens on 170 claims in one motion to dismiss, Roku does not even attempt to articulate what it contends the claimed advances are for the other "Set-Top Box" patents. That fails.

The patent specification and claims prove this. Even accepting Roku's misguided attempt to lump these all together, the patents teach that there are specific technical problems beyond the ones articulated in the "LAN" Network Patents. That is, "the same issues (e.g., use of PII or not, dynamic device addresses) that must be addressed for cross-media *targeting* must also be addressed for cross-media *tracking*." '164 patent at 8:67–9:3. The inventors, Mr. Shkedi and Mr. Shlomo, thus set out to implement STB network-specific technical solutions "despite the use of dynamic device addresses for the user's online access or television service." *Id.* at 9:4–10.

The claims of the "Set-Top Box" Network patents are *not* directed to a result or effect that itself is the abstract idea and merely invoke generic computer processes or machinery. Rather, again, when properly accounting for the claimed advance, the claims provide a technical solution to a technical problem that was unique to computer network technology. Specifically, even ignoring most of the limitations in the independent claims alone, the claimed advances of the "Set-Top Boxes" Network patents cover several additional core "claimed advances" that Roku improperly disregards, underlined below:

- '164 Patent: <u>automatically</u> causing an online advertisement to be selected based on profile information related to a television advertisement, <u>where no personal identifiable information (PII)</u> is used and based on automatically recognizing the user interface and television set-top box are connected to a common local area or "LAN" network.
- '069 Patent: <u>automatically</u> causing an action with respect to online activity, based on a notification received at a computer, where the notification includes or references a set-top box identifier and results from a television advertisement, where no personal identifiable information (PII) is used and based on automatically recognizing the user interface and television set-top box are connected to a common local area or "LAN" network.

• '198 Patent: <u>automatically</u> causing an action with respect to online activity, based on a notification received at a computer, where the notification references a set-top box identifier and where an online <u>user interface device identifier and the set-top box identifier</u> are associated without using personal identifiable information (PII) pertaining to a user of <u>the set-top box</u>

Moreover, the "Reasons for Allowance" and other parts of the prosecution history confirms all this. *See, e.g.*, Exs. 1–4.

Roku simply ignores these clear statements to erroneously conclude that the claims merely recite a result and are abstract. Again, that is error. *See TecSec*, 978 F.3d at 1292.

Under controlling Federal Circuit precedent such as *DDR Holdings*, these claims are **not abstract** and, thus, patent-eligible, under the law. Indeed, analogous recent cases—which post-date all the cases cited by Roku—confirm this. In particular, in *Pucs, Inc. v. Hulu, Inc.*, the asserted patent concerned a "method of delivering video and display ads, as well as making transactions, when users pause any device on over the top ('OTT') media space." *Pucs, Inc., et al. v. Hulu, Inc.*, No. 2:21-cv-02302-RGK-KES, 2021 WL 4780576, at *3 (C.D. Cal. Aug. 18, 2021). The court held that the defendant could not meet its burden of proving ineligibility, especially at the pleadings stage—and it denied the defendant's motion to dismiss. *Id.* Roku's motion to dismiss on the Set-Top Box (used as a synonym for over-the-top OTT media) patents fails as well.

4. Even Under Roku's Erroneous and Oversimplified Summary of the Claims, the Patents Are Not Abstract Under *DDR Holdings* and Other Relevant Cases

Even under Roku's improperly watered-down characterization of the patents' claimed advances, it is clear that they are not abstract. Even ignoring several reversible errors, Roku concedes that, at its core, the patent groupings are limited to LAN and Set-Top-Box Networks. The network-specific problems and claimed solutions in the patents are patent-eligible under the law. *See, e.g., DDR Holdings*, 773 F.3d at 1255–59 (claims requiring an "outsource provider" having a web server directing visitor to an automatically-generated hybrid are eligible as a matter

of law because they solved problems specific to the same technical field).

For instance, in *CosmoKey Solutions GmbH & Co. KG v. Duo Security LLC*, the patentee appealed a district court decision holding his patents—which covered a "specific improvement" to network access that can "advantageously be carried out with mobile devices of low complexity"—ineligible under § 101. No. 2020-2043, 2021 WL 4515279, at *5 (Fed. Cir. 2021). The Federal Circuit reversed, holding that, contrary to the district court's conclusion, the patent disclosed a technical solution to a security problem in networks. Further, the intrinsic record suggested that the steps for network access that were taught and claimed were unconventional, including "having the authentication device check whether a predetermined time relation exists between the transmission of the user identification and a response from the second communication channel. And either of these facts should have been enough to avoid ineligibility. *Id*.

Likewise, in *Packet Intel.*, the court upheld the eligibility of patents that disclosed an unconventional method for monitoring data packets exchanged over a computer network. 965 F.3d at 1303–04. The district court rejected the defendants' oversimplification of the claims as being directed to "collection, comparison, and classification of information," and held that they were instead directed to "specific technological solutions." *Id.* at 1308. The Federal Circuit affirmed, holding that the claim "purports to meet a challenge unique to computer networks," as confirmed by statements in the specifications identifying limitations in conventional network monitoring systems which the claimed inventions sought to address. *Id.* at 1309–10.

And in *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, the Federal Circuit reversed yet another order of dismissal under § 101, this time concerning claims directed to a network technology for exchanging data between a primary station and a secondary station. *Uniloc USA, Inc. v. LG Electronics USA, Inc.*, 957 F.3d 1303, 1305 (Fed. Cir. 2020). In so holding, the Federal Circuit

explained that the claims were directed to a "specific asserted improvement in the functionality of the communication system itself," and that the "invention's compatibility with conventional communication systems does not render it abstract." *Id.* at 1308–09. "Nor does the fact that the improvement is not defined by reference to 'physical' components" change the result. *Id.*

5. Free Stream Media and the Other Cases cited by Roku are Inapposite Because They Did Not Involve Specific Claimed Solutions to Technical Problems That Were Unique to LAN Networks or Set-Top Box Networks

Roku repeatedly cites to *Free Stream* as if that decision changed the law on patent-eligibility or ruled that all targeted advertising patents are ineligible. It did neither. To the contrary, even the court in *Free Stream* acknowledged that the § 101 analysis must be claim-specific. It also held that "[a]ll that is required at the eligibility phase is that the claim itself must identify 'how' that functional result is achieved by limiting the claim scope to ... *concrete action*, in the case of a method claim." 996 F.3d at 1363.

The Court then drew a sharp distinction between that case and this one, which Roku fails to mention. The main reason the court in *Free Stream* decided that the claims at issue were patent-ineligible was that they recited a generic result. And while the claims taught various methods for communicating with other devices on the same network, critically, they *failed to "incorporate any such methods" in the claims. Id.* at 1363–64 ("Here, Samba asserts that its invention allows devices on the same network to communicate where such devices were previously unable to do so.... *But the asserted claims do not at all describe how that result is achieved.*"). Here, in sharp contrast, Roku does not even contend that the claims-at-issue only recite a result. Nor could it. One look at the claims proves otherwise, because they recite a very specific and narrow action for solving the technical problems at the heart of the patent specifications, as described above. Each claim recites a specific, unconventional cross-media network solution that solved the technical

problem. *Free Stream* is thus inapposite. And so are the other cases cited by Roku, which do not involve specific claimed solutions to technical problems that were unique to LAN or Set-Top Box Networks. Rather, invoked the use a computer as merely a tool to achieve an intended *result* or else a longstanding *human-organizing* activity or fundamental *economic* practice.

B. Roku Also Fails to Show that the Claims Lack Inventive Concept Under *Alice* Step 2—To the Contrary, the Record Disproves Its Conclusory Arguments.

Because Roku cannot meet its burden under step one, the inquiry ends here and step two need not be addressed. But in any event, Roku also cannot meet its burden under step two.

1. The Intrinsic Record Alone Confirms that the Claimed "LAN" Network Inventions and "Set-Top Box" Network Inventions Involve Technological Solutions that Were Not Well-Understood, Routine, or Conventional

Where the claims elements involve nothing more than "well-understood, routine, and conventional activity previously engaged in by researchers in the field, they do not constitute an 'inventive concept." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). But if the inventions "improve an existing technological process" or "solve a technological problem in 'conventional industry practice," they are patent eligible. *Alice*, 134 S.Ct. at 2358. Even where elements are conventional technologies, the specific arrangement of technologies can also form the inventive concept. *Id.* at 1350.

Roku must prove, by clear and convincing evidence, that that the ordered combination of elements merely recites a conventional, routine and generic invention. And disputed issues of fact should defeat any motion to dismiss. *See Aatrix*, 882 F.3d at 1126. Roku, however, does not make a real attempt to meet its burden under *Alice* step two. Instead, it merely offers conclusory attorney argument to briefly assert that none of the additional limitations in the 170 claims renders the claims inventive. (D.I. 25 at 14–15.) This improperly fails to acknowledge vast swaths of the record. For instance, the '198 patent was prosecuted and issued well after *Alice* was published—

and it was thus examined under the PTO's *Alice* guidelines. As a result, the PTO examined the claims under *Alice*, and, beyond rejecting any contention that it is abstract (because it is not), the PTO expressly found that the issued claims are unconventional in view of all the prior art of record. Indeed, the PTO tackled the issued directly and stated:

(PEG) effective January 7, 2019. However, even if the claims were considered to be abstract under the revised guidelines, they are more than a drafting effort as the limitations "automatically with the computer system causing a first action to be taken with respect to online activity through the first online user interface device subsequent to presentation of the first television advertisement" and "wherein the first online user interface device identifier and the first set top box identifier are associated without using personally identifiable information pertaining to the user of the set-top box that corresponds to the first set-top box identifier" are considered, as an ordered combination, to integrate a practical application (beyond generally linking an abstract idea to a technological environment and more than a drafting effort), and also to be significantly more (i.e. not well-understood, routine or conventional). The claims

Though the other "Set-Top Box" Patents were issued earlier, the specification and prosecution history there also makes clear that the claims were unconventional. *See* Exs. 1–4.

The intrinsic record evidence confirms the same for the "LAN" patents. This includes denying post-issuance challenges and, far from finding the ordered combination of claims known and conventional, it found that the prior art did not even disclose the highlighted elements below, in the case of the '398 patent:

- 13. A method implemented using a programmed hardware computer system, the method comprising:
- (a) based on first electronic profile data associated with an electronic identifier of a first device, automatically <u>causing</u>, with the computer system, <u>an action to be taken</u> with respect to a second device that is indicated at the time of the action by an electronic identifier electronically associated with the first device identifier;
- (b) wherein the electronic association between the first and second device identifiers is based on connection, before the action, of each of the first and second devices, independently of the other, to a common local area network, wherein the computer system is connected to the local area network through the Internet but is not in the local area network.

The same is true for the '878 patent. *See* Exs. 1–4. In sum, the disclosed inventions do not merely recite well-understood, routine, conventional activities but are necessarily rooted in network technology (as Roku admits), and provide specific, unconventional technological solutions.

2. Roku's Conclusory Arguments are Unsupported and Contrary to the Intrinsic Record and the Law.

Again, Roku makes conclusory attorney argument to just say—in as few words as possible—that none of the additional limitations in the 170 claims renders the claims inventive. (D.I. 25 at 14–15.) But this approach suffers several fatal flaws.

First, a defendant cannot prevail on this step simply by showing that each individual claim element was "known in the art" or conventional. BASCOM, 827 F.3d at 1349. Here, Roku focuses on just a few isolated elements and ignores that the specification, the PTO, and even the PTAB in some cases has made rare findings that the ordered combinations of claim elements are not known or conventional.

Second, the elements are not generic. To the contrary, each patent has many independent and dependent claim elements that, taken together, are not generic. For instance, claim 21 of the '878 patent (shown above) has a specific ordered combination of elements that Roku does not even acknowledge. Likewise, claim 19 (which depends from 16, which depends from 13) in the '398 patent, has an ordered combination of elements that is described as entirely unconventional given the technical problem and solution. '398 patent at 25:19–25, 17:46–18:50. On the Set-Top Box Patents, as another example, the ordered elements of dependent claim 19 of the '164 patent, claim 24 of the '069 patent, and claim 24 of the '198 patent also are unconventional. '164 patent at 27:41–48; '069 patent at 27:4–13, 9:21–35, 9:49–10:11, Fig. 9; '198 patent at 27:11–50, 9:11–10:21. And despite bearing the burden, Roku has provided no evidence to the contrary—just conclusory attorney argument.

And *third*, even where elements are generic or conventional technologies, analyzing them individually does not pass muster, because the *specific arrangement* of technologies can also form the inventive concept. Construing the claims and allegations in the complaints in favor of the patent owner, as the Court must for a motion to dismiss, it is clear that the claims are "more than a drafting effort designed to monopolize" any purported abstract idea. *Improved Search*, 170 F. Supp. 3d at 694. Instead, the claims "improve an existing technological process," and are thus patent eligible. *Alice*, 134 S.Ct. at 1351.

3. At Minimum, There Are Questions of Fact that Preclude Resolution of the Issue at the Pleadings Stage

As discussed in detail above, the faces of the patents themselves demonstrate that that they are inventive as they directed to unconventional technological solutions to technological problems. At minimum, these allegations—which must be accepted as true and contradict Roku's unsupported assertions that the claims are conventional—raise factual disputes precluding dismissal at the pleading stage. *See Aatrix*, 882 F.3d at 1126–28. Moreover, as there are 170 patent claims involved here, if this Court has any reservations about the scope of the claims, it deserves a full claim construction record when deciding those issues. *MyMail, Ltd. v. ooVoo, LLC*, 934 F.3d 1373, 1380 (Fed. Cir. 2019) ("Nevertheless, the district court's failure to address the parties' claim construction dispute is error under *Aatrix Software.*, 882 F.3d at 1125.") These provide additional reasons for denying Roku's motion.²

VI. <u>CONCLUSION</u>

For the foregoing reasons, Roku's motion should be denied. In the alternative, AlmondNet should be granted leave to amend its counterclaims.

² In the event the Court is inclined to grant any portion of Roku's motion, Federal Circuit law makes clear that it should do so without prejudice and give the patent owner a chance to amend its pleadings. *See, e.g.*, *Aatrix*, 882 F.3d at 1126.

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